

**COORDINATED PROTECTION PROGRAM FOR THE
SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY**

CATEGORY III IMPLEMENTATION PLAN

***PROPOSALS FOR THE DEVELOPMENT AND IMPLEMENTATION OF
MEASURES TO CONTROL NON-FLOW FACTORS***

*Prepared on Behalf of the
Ad Hoc Category III Working Group
Under the Sponsorship of the
Joint California Water Users*

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1.0 INTRODUCTION

On December 15, 1994, the State of California, the Federal government, and participating California water user organizations and environmental interest groups entered into an historic agreement establishing principles to enhance protection of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary ("Bay-Delta"). This statement of Principles for Agreement on Bay-Delta Standards ("Principles Agreement") created a framework for implementing a set of integrated water quality, flow, and operational control strategies to preserve and enhance estuarine habitat in the Bay-Delta while simultaneously respecting the multiple beneficial uses associated with the Estuary. It also stated that the signatories were committed to the implementation and financing of so-called "Category III" measures to address non-flow factors as part of a comprehensive ecosystem protection plan for the Bay-Delta.

Under the Principles Agreement, participating urban and agricultural water users,¹ State and Federal agencies (represented by the California Water Policy Council and Federal Ecosystem Directorate, or "CALFED"), and environmental interest groups committed to working in an open and collaborative process to determine priorities and financial commitments for the implementation of Category III elements. The parties further committed to prepare and finalize a detailed plan for implementation of Category III measures by the time the State Water Resources Control Board ("SWRCB" or "State Board") adopts final water quality, flow, and operational requirements for the Bay-Delta.

Consistent with the mandate of the Principles Agreement, considerable effort has been made to develop a Category III Implementation Plan that reflects broad consensus among a variety of interests; including participating water users, CALFED, environmental groups, and affected fishery interests. An ad hoc Category III Working Group including representatives from each of these interests was formed shortly after the Principles Agreement was announced. The Group has been meeting regularly to identify potential Category III measures, define criteria for evaluating potential measures and setting implementation priorities, and propose institutional mechanisms for the funding and continued oversight of the program. The results of the Working Group's collaborative effort, as well as its proposals for further work, are described in this Plan.

1.1 Category III and the Principles Agreement

The Principles Agreement stated that the signatories are committed to the implementation and financing of Category III measures as an essential part of a comprehensive ecosystem protection plan for the Bay-Delta. To fulfill this commitment,

¹ Participating water users were identified in the Principles Agreement as "CUWA/AG". CUWA/AG refers to a coalition of urban and agricultural water user organizations that includes the California Urban Water Agencies ("CUWA") and its members, the San Luis Delta/Mendota Water Authority, the Kern County Water Agency, and the Tulare Lake Basin Water Storage District. The Joint California Water Users group, or "Joint Agencies", is the successor to CUWA/AG. The terms "Joint Agencies" and "CUWA/AG" are used interchangeably in this Plan.

the signatories to the agreement endorsed a set of principles for Category III implementation. In summary, those principles are:

- Category III activities are expected to require a financial commitment estimated at approximately \$60 million a year.
- New sources of funds are anticipated to be required to adequately finance Category III activities. Some Category III activities may be financed through possible reprioritization of existing funds, with additional funds to be secured through a combination of Federal and State appropriations, user fees, and other sources as required.
- Monitoring would be a high priority in addition to Category III elements and would have a high priority for separate funding.
- The screening of currently unscreened diversion points in the Bay-Delta and its watershed would have the highest priority for Category III funding.
- CUWA/AG will work with CALFED and environmental interests in an open and collaborative process to determine priorities and financial commitments for the implementation of Category III elements.
- The process would be under the sponsorship of CUWA/AG, with the expectation that a detailed plan for implementation of agreed-upon Category III principles will be finalized before publication of final Bay-Delta standards by the State Board.

At the same time the Principles Agreement was adopted, the State Board issued its draft Water Quality Control Plan for the Bay-Delta ("Draft WQCP"). Issuance of the Draft WQCP followed a series of workshops conducted by the State Board during the summer of 1994 in order to gather information and recommendations for new standards to protect estuarine habitat and other beneficial uses associated with the Bay-Delta. Among the topics the State Board specifically sought to address during the workshops was fish and wildlife declines in the Estuary "from causes other than flows and diversions, such as pollution, introduced species and habitat loss." See SWRCB Notice of Public Workshop (March 25, 1994). Thus, while the Draft WQCP necessarily focuses on the establishment of standards and operational measures within the scope of its water quality and water rights authority, it also includes recommendations for future actions both within and outside the scope of the State Board's authority, such as recommendations for Category III activities. See Draft WQCP at page 30.

1.2 Overview of Category III Implementation Plan

The Category III Implementation Plan describes the efforts of the Category III Working Group to meet the commitments and expectations set out in the Principles Agreement. To that end, the Plan addresses the following areas:

- Approach and Implementation Strategy, which deals with the organization and membership of the Working Group as well as its overall approach to Category III implementation.
- Information Development, which discusses the process established by the Working Group to gather information regarding individual Category III activities.
- Preliminary Measure Identification, which describes the range of possible short-term and long-term Category III measures that have been identified by the Working Group to date.
- Institutional Approach, which addresses ongoing efforts to identify potential sources of funding for Category III measures and to develop institutional mechanisms for administering future activities.
- Measure Selection Process, which discusses the overall proposed approach to selecting Category III measures.
- Funding Considerations, which addresses outstanding issues regarding Category III funding.

While the Implementation Plan offers various recommendations in each of these areas, those recommendations are not necessarily intended to be definitive. Additional work will be required to fully develop specific proposals as the Plan is carried out. During this process, new proposals may be suggested as alternatives to aspects of the Plan. Thus, the Plan should be regarded essentially as a working document subject to further clarification or modification as implementation efforts move forward.

2.0 APPROACH AND IMPLEMENTATION STRATEGY

To carry out the mandate of the Principles Agreement, an ad hoc Category III Working Group was convened in January 1995 to oversee development of a Category III Implementation Plan. The Working Group was structured to provide a balanced representation of various organizations interested in Category III implementation. Initially, the Working Group included four representatives of the water user community, four CALFED representatives, and two representatives each from environmental and fishery organizations. (The organization of the group subsequently was expanded to

include additional CALFED representatives to ensure involvement by the U.S. Fish & Wildlife Service and the National Marine Fisheries Service.)

The Working Group has been comprised of the following individual participants:

- Nat Bingham, Pacific Coast Federation of Fishermen Association
- Gary Bobker, Policy Analyst, The Bay Institute
- Randall Brown, Chief of Environmental Services Office, California Department of Water Resources
- Dick Butler, National Marine Fisheries Service
- Jim Crenshaw, California Sportfishing Protection Alliance
- Perry Herrgesell, Chief of Bay-Delta and Special Water Projects Division, California Department of Fish & Game
- Ed Huntley, Chief of Division of Planning, California Department of Water Resources
- Laura King, Environmental Affairs Officer, East Bay Municipal Utility District
- Cynthia Koehler, Attorney, Natural Heritage Institute
- William B.J. Miller, Consulting Engineer, San Luis and Delta/Mendota Water Authority
- Robert Pine, U.S. Fish & Wildlife Service
- Lowell Ploss, Chief of Central Valley Water & Power Operations Office, U.S. Bureau of Reclamation
- James Roberts, Deputy General Counsel, Metropolitan Water District of Southern California
- Cliff Schulz, Attorney, Kern County Water Agency

The Working Group has focused its efforts in five related areas:

First, the development of an appropriate institutional mechanism to carry out the Category III Implementation Plan until a more permanent structure can be put into place.

Second, the selection of Category III measures that the Working Group believes preliminarily can be implemented in the near term, i.e., measures for which substantial progress can be achieved in 1995-1996.

Third, the identification of an approach for the selection of Category III measures in the long term.

Fourth, the establishment of parameters within which a permanent Category III institutional structure can function effectively.

Fifth, the exploration of ways in which outstanding Category III funding issues can be resolved.

The Working Group has been assisted in its efforts with respect to several of these areas by discrete task groups, including the Category III Implementation Subcommittee and the Category III Institutional Structure and Funding Subcommittee. Additional activities, focusing on (among other things) on the development and application of Category III evaluation criteria, have been conducted on a more informal basis. Staff activities generally, including the coordination of Working Group oversight and the development of the Category III Implementation Plan, have been coordinated on behalf of CUWA/AG by the Santa Clara Valley Water District.

3.0 INFORMATION DEVELOPMENT

As an initial task, the Working Group requested that the Implementation Subcommittee survey various non-flow measures and activities that have been recommended or proposed in the past. The Implementation Subcommittee polled various experts and other interested parties for their input with respect to possible measures or activities. It also attempted to identify recommendations for Category III actions in various existing reports and other documents. Finally, to obtain information about potential new measures, participants in discussions organized by the Implementation Subcommittee have been asked to prepare specific proposals for both near-term and long-term implementation. Agencies and organizations that have submitted proposals to date include:

- California Department of Fish & Game
- California Wildlife Conservation Board
- California Department of Water Resources
- U.S. Fish & Wildlife Service
- U.S. Environmental Protection Agency
- U.S. National Marine Fisheries Service
- Bodega Bay Marine Laboratory
- East Bay Municipal Utility District
- Fishery Foundation of California

- California Waterfowl Association
- San Francisco Estuary Institute
- The Nature Conservancy
- Pacific Coast Federation of Fishermen Association
- University of California at Davis
- Port of Sacramento
- Friends of the San Francisco Estuary
- National Wetland Science Training Cooperative
- Monterey Bay Salmon & Trout Project
- Suisun Resource Conservation District
- City of Chico

In conjunction with the initial data-gathering process, the Implementation Subcommittee has developed a database to bring together in summary form relevant information regarding individual proposals. The database is intended to provide a single reference source for known potential Category III measures and to provide a basis for a preliminary evaluation and screening of measures under consideration. The kinds of information being incorporated into the database (where applicable) include:

- Measure Category²
- Measure Title
- Geographical Region of Measure
- Measure Description
- Species Benefited
- Ability to Monitor Benefits
- Measure Costs
- Source (Report/Document/Meeting) and Point of Contact
- Source Date
- County
- Water District
- Information Regarding Support/Opposition
- Agencies Involved in Measure
- Status of Environmental Review Documentation/Permits
- Estimated Time to Completion/Phasing
- Unresolved Technical Problems and Potential Impacts
- Possible Cost-Sharing Partners
- Contact Person

² In this context, the term "Measure" includes both regulatory programs and studies as well as capital projects. Measure categories include those preliminarily identified in the Draft WQCP, i.e., unscreened water diversions; waste discharges; legal fishing; illegal fishing; land-derived salts; control of introduced species; loss of riparian, wetland, and estuarine habitats; and channel alterations. Two new categories, fish passage/barriers and artificial propagation, have been identified since the Draft WQCP was issued.

To date, over three hundred potential measures, representing potential total expenditures in excess of \$1 billion, have been included in the Category III database. A summary listing of included measures is attached as Exhibit A. Not all of these measures are necessarily likely candidates for implementation, however. In most cases, information regarding identified measures and their perceived benefits has not been developed to the extent needed for adequate measure evaluation. In some cases, however, this information has been provided solely by measure proponents and has not been independently verified. In addition, the evaluation of relative ecological or biological merit has not been a primary objective of the Implementation Subcommittee in this initial round of data collection.

The maintenance and update of the database will require an ongoing effort. Material for inclusion in the database continues to be solicited and compiled by the Implementation Subcommittee, and it is expected that this work will carry over into future phases of Category III implementation. The database (as appropriately modified and expanded in the future) should provide a useful tool to support ongoing Category III implementation activities.

4.0 PRELIMINARY MEASURE IDENTIFICATION

Given the preliminary nature of its efforts to date, the Working Group has not attempted to perform the detailed evaluation and prioritization of candidate measures that will be required for Category III implementation in the long term. It has attempted, however, to identify specific measures that may be appropriate for implementation in the near term, i.e., measures for which it appears that substantial progress can be made toward implementation in the 1995-96 time frame. The Working Group's consideration of potential near-term measures has been based on a preliminary screening by the Implementation Subcommittee, which assessed candidates in light of the following screening criteria:

- Could the proposed measure be partly or fully implemented within the 1995-96 time frame?
- Is there sufficient information for preliminary evaluation of the measure?
- Have cost-sharing opportunities been developed to supplement needed Category III monies?

The Implementation Subcommittee identified approximately forty possible measures that it believed met its preliminary screening criteria. A list of these measures is attached as Exhibit B. The Working Group has reviewed this list and selected fifteen measures for further consideration, based on a preliminary consensus that each of these measures should result in at least some material biological benefit. The measures are

described briefly below. (More detailed information regarding each of the measures and its perceived benefits is included in Exhibit C.)

Patterson Fish Screen Project

Fish screens were installed on the Patterson irrigation district diversion on the San Joaquin River in the late 1970s. Due to the low number of returning adult salmon and low production of juveniles, inappropriate design and inefficiency of screens, and high-cost maintenance, the screens were abandoned a few years after installation. The purpose of this action would be to improve the downstream survival of fall-run Chinook salmon smolts in the San Joaquin River by installing a positive barrier fish screen to protect migrating fish.

Parrott-Phelan Pumping Station (M&T Ranch) Project

The purpose of this action would be to restore Big Chico Creek salmon and steelhead populations. The operation of the unscreened M&T pumps, located on Big Chico Creek, appears to be a severe impediment to protecting and restoring spring-run Chinook. During many years, these pumps actually cause streamflow reversals during the critical downstream migration period, and a 100% loss of downstream migrants occurs. Further, adult spring Chinook migrating up the Sacramento River have difficulty locating the mouth of Big Chico Creek when flows are reversed. The proposed solution is to relocate the station to the mainstream of the Sacramento River and to install and operate a positive barrier fish screen.

Lower Mokelumne Screening Project

In the lower Mokelumne, there have been as many as 91 pumps which divert water for farming and ranching. The majority of these pump intakes are unscreened, and the intake pipes are often located along the river bank where juvenile salmonids migrate. The peak diversions coincide with the period of juvenile salmon and steelhead outmigration. This project would screen all unscreened diversions and improve those diversion canal screens which need improvement.

Extension of the Biologically Integrated Orchard Systems (BIOS) Project

The BIOS project is designed as a three-year information and technology transfer program for eliminating use of diazinon and reducing other pesticides used in California almond production. The proposed measure seeks funding to expand the BIOS program to all major almond-growing regions adjacent to the San Joaquin and Sacramento rivers.

Napa-Sonoma/Marsh Restoration

This proposal would restore abandoned salt ponds to fish and wildlife habitat (mostly tidal restoration). The effort would require replacing the existing 48 in. pipe and slide gate with two 48 in. pipes fitted with combination screw flap gates on both sides.

Prospect Island Restoration

This proposal is to share the costs of restoring 1,228 acres of tidal wetland/aquatic habitat. The land is currently in agricultural use. To restore the property to tidal habitat, the levees would be breached in two locations. Prior to breaching the levees, islands would be created by using materials on-site. Interior levees and islands would be stabilized using biotechnical techniques.

Riparian Corridor Restoration on Flood-Damaged San Joaquin Tributaries

This proposal consists of acquiring about 6,000 acres of recently overflowed crop lands and managing them as riparian strips and seasonal wetlands to intercept and immobilize sediment and sediment-bound pesticides from San Joaquin River tributaries. These materials now reach and degrade shallow-water/low-salinity delta channels.

Battle Creek Restoration Proposal

This proposal would restore anadromous fish production to approximately 40 miles of upper Battle Creek (above Coleman Hatchery) by purchasing portions of a power project or its power potential, thereby returning a portion of the total natural runoff to the stream channel to produce healthy self-sustaining populations of anadromous fish. Historically, Battle Creek produced large populations of Chinook salmon, including spring-run Chinook and some winter-run Chinook and steelhead.

Little Mandeville Restoration Project

This proposal involves purchasing and restoring Little Mandeville Island as tidal wetland and shaded riverine habitat. The island currently is flooded. Following purchase, spoil material would be deposited in selected portions of the island to create a mosaic of open channels and emergent wetland habitat.

Gravel Restoration on Mokelumne River

This proposal would result in the addition of gravel to the Mokelumne River to enhance salmon spawning habitat and to optimize habitat by creating spawning berms.

Cosumnes River Watershed Project

The proposed project consists of three components: (1) the purchase of conservation easements along the Cosumnes River (within the prescribed boundaries of the Bay-Delta) and subsequent restoration of these areas to riparian habitats, with a focus on areas of bank and levee instability; (2) the evaluation and modification of the fish ladder at a diversion dam for Rancho Murietta water supplies; and (3) the analysis and enhancement of the fall-run salmon spawning gravels to determine present conditions and restoration and/or enhancement needs.

Riparian Restoration - Sacramento River (Verona to Colusa)

This project consists of planting native riparian vegetation on riverside levee toe berms and riprapped waterward edges of those berms. The project would utilize locally available vegetation, and would require approximately three years of post-planting maintenance, consisting mainly of watering, weeding, and monitoring. Each site is a nearly-level berm approximately forty feet wide, and would provide nearly ten acres of riparian habitat where none presently occurs.

Clough Dam Removal Project

The purpose of this action is to improve the upstream and downstream passage of adult and juvenile spring-run Chinook salmon and steelhead. Clough Dam is privately owned and has a fish ladder. Although the ladder operates reasonably well, there are frequent problems that hinder the entrance of salmon and steelhead. The overall result is often a delay in the upstream passage of adults.

Captive Breeding/Artificial Propagation of Delta Smelt

This proposal would result in the development of methods and techniques for captive breeding and artificial propagation of Delta smelt (including broodstock maturation, tank spawning, egg incubation, larval rearing, and fish health management).

Sacramento River Winter-Run Chinook Salmon Captive Broodstock Program

This proposal requests partial support of the existing Winter-Run Chinook Captive Broodstock Program (WRCCB). The WRCCB project is a large multi-agency activity that is utilizing new technologies to preserve the State and Federally ESA-listed Sacramento River winter-run Chinook.

It should be emphasized that these measures, the total cost of which is estimated to be less than the \$60 million per year anticipated for Category III implementation in the

Principles Agreement, reflect only the preliminary measure selections of the Working Group. The final assessment of these measures will require a more thorough review within the institutional framework established under this Plan for near-term Category III implementation. The prompt completion of that assessment will receive a high priority. At the same time, additional measures may be identified that could bring the total expected cost of Category III implementation to a level at or above that contemplated by the Principles Agreement.

5.0 INSTITUTIONAL APPROACH

Much of the focus of the Category III Working Group to date has been on the identification of measures and institutional support mechanisms that could be implemented within the same overall time frame during which the Draft WQCP is expected to be finalized and put into effect. Different institutional considerations may come into play when the focus shifts to longer-term implementation issues. The range of potential measures that could be implemented in the long term is much larger and encompasses a broader variety of different types of activities. On the other hand, there may be less information available for use in evaluating the merits of potential long-term measures, and the evaluation process may therefore have to incorporate more rigorous methods for developing that information over time.

For these reasons, the Working Group is proposing a phased approach to Category III implementation. Phase One would involve the establishment and operation of an interim institutional mechanism to carry out the Implementation Plan until a permanent institutional structure can be put into place. The interim mechanism would be responsible for developing and recommending the permanent institutional structure, among other things. Phase Two would involve the establishment of the permanent institutional structure developed during Phase One.

5.1 The Memorandum of Understanding

Phase One of Category III implementation, aspects of which already have been initiated by the Working Group, should begin formally upon completion of the Category III Implementation Plan. At that point, the Working Group has proposed assigning principal responsibility for carrying out Phase One implementation activities to a Category III Steering Committee. The overall parameters within which the Steering Committee will function have been defined in a proposed Memorandum of Understanding Regarding Short-Term Category III Activities ("MOU"), a copy of which is attached as Exhibit _.

While its specific composition has not yet been determined, the Steering Committee is expected to include representatives reflecting the interests of each of the following groups: CALFED, the environmental community, the fishing community, and the ag/urban community. Each group will separately be responsible on an ongoing basis for determining the composition of its representation on the Steering Committee. The Steering Committee generally will have the power to carry out the Category III

Implementation Plan in the near term (including the power to develop a permanent institutional framework for the implementation of Category III measures), to approve Category III measures pending the establishment of a permanent institutional framework, and to determine whether funds will be committed for the implementation of such measures. It is expected that CUWA/AG will have the responsibility of facilitating and staffing the Steering Committee's activities.

A principal purpose of the proposed MOU is to provide an interim structure for holding and disbursing initial commitments of funds for Category III activities until a permanent structure can be developed and implemented. The Metropolitan Water District of Southern California ("Metropolitan") already has made an initial contribution of \$10 million to fund Category III measures, and Metropolitan has been designated initially as the treasurer of that fund. The provision of additional initial financing for Category III activities will be made in accordance with a process established by a policy-level sub-committee convened expressly for that purpose. Among other things, this sub-committee will address the identification of incentives to contribute to the Category III fund established by Metropolitan and the development of mechanisms to allocate Category III funding responsibilities. It is expected that the Steering Committee and any successor Category III institutional structure will be guided by the policy sub-committee's resolution of these issues.

Under the proposed MOU, the Steering Committee will receive technical support from a Technical Advisory Committee ("TAC"). Identifying appropriate individuals for participation in the TAC will be one of the first tasks of the Steering Committee. At a minimum, the TAC should be comprised of a group of individuals with scientific expertise in hydrology, biology, and other areas relevant to the protection of aquatic resources in the Bay-Delta. The TAC would include an Ecological Team comprised of a group of scientific experts (primarily biologists) and a Feasibility Team comprised of individuals with special knowledge of relevant considerations affecting the practical implementation of potential Category III measures. Each team would be expected to play important roles in the Category III measure selection process. See Section 6.0, below.

An initial task of the Steering Committee will be to approve a set of specific program objectives to direct the measure selection process and monitor the effectiveness of ongoing implementation activities. The concept of program objectives in this context means more than simply a set of general goals for Category III implementation (e.g., "enhancement of estuarine habitat"). It also includes the identification of specifically targeted ecological benefits that can be achieved through selected Category III measures (e.g., promoting the recovery of a specific species or restoring a particular habitat type within identified ecological systems or geographic areas). Objectives would not be used as a measure of success or failure for the Category III program, but are intended to focus the project selection process on those areas of greatest concern and on those activities which can provide the greatest benefit.

In addition to establishing program objectives, the Steering Committee will be responsible for developing an appropriate set of guidelines describing specific criteria for completing the review and evaluation of Category III measures identified as candidates for implementation in the near term. The guidelines also would provide direction on how priorities should be set in implementing selected measures. Criteria to be developed in this context would address both biological benefit considerations ("biological criteria") and practical considerations affecting implementation ("practicality criteria").

Upon completion of appropriate criteria guidelines, the TAC would review, rank, and prioritize proposed near-term Category III measures. The TAC initially would rank individual measures separately according to how well they meet applicable biological and practicality criteria, and it would make recommendations for implementing measures based on a comparison of their relative rankings under both sets of criteria. The Steering Committee would then review the TAC's recommendations and, to the extent appropriate, select the "best" measures to address geographic and categorical needs. At this stage, the Steering Committee also would make decisions, where appropriate, on the application of discretionary Category III funds available under the proposed MOU.

In addition to reviewing proposed Category III measures and making recommendations on them to the Steering Committee, the TAC also would be responsible for identifying areas of concern that are not adequately addressed by the measures already under consideration. To the extent appropriate, the TAC would be guided in this process by a comparison of proposed measures with Category III program objectives approved by the Steering Committee. It is expected that the TAC would submit its conclusions to the Steering Committee, which would have broad discretion in initiating necessary actions in response to the TAC's recommendations. The Steering Committee also would be authorized to make recommendations to other governmental agencies on appropriate actions within the scope of their respective jurisdictions.

Finally, the Steering Committee could direct the solicitation of new proposals from outside sources specifically targeted to issues that have not otherwise been adequately developed in existing proposals. Additional proposals resulting from Steering Committee action would be submitted to the TAC for evaluation based on the same general criteria used to rank other measures. The TAC, working with Steering Committee staff, also would be responsible for developing and maintaining a complete list of Category III-related activities being carried out by others, in order to promote coordination of funding and implementation and to avoid duplication of effort.

5.2 Implementation of a Permanent Institutional Structure

As envisioned in the proposed MOU, the operation of the Category III Steering Committee will continue only until a permanent or quasi-permanent institutional mechanism can be established for long-term Category III implementation. The Working Group has not sought to predetermine the nature or form of the long-term institutional structure required for this purpose, although preliminary consideration has been given to

some possible institutional alternatives. Instead, the Working Group has focused on functional and programmatic aspects of the institution's operation, with the expectation that the Category III Steering Committee will take primary responsibility for establishing the appropriate organizational structure. The Steering Committee also will be expected to assign a high priority to the implementation of a long-term institutional mechanism in order to meet the mandate of the Principles Agreement to fully integrate Category III efforts in a comprehensive overall Bay-Delta ecosystem protection program.

Whatever institutional form ultimately is adopted, it should be able to accommodate various general functional requirements. Among other things, it should:

- Include a policy body made up of individuals representing a wide spectrum of interest groups and governmental representatives. As with the Category III Working Group and proposed Steering Committee, the policy body would be comprised of decision-makers from CALFED, the water users community, the environmental community, and the fishing community. The policy body would have final decision-making responsibility for all matters within the organization's scope of authority. Most importantly, the policy body would be responsible for selecting proposed Category III measures for implementation, based on both biological and practical considerations.
- Include one or more technical advisory panels to provide scientific, technical, and legal support to the policy body. Panels could be expanded from time to time, as needed, to include representatives of parties who are interested in a particular proposed measure, but who are not otherwise involved in the overall process. A principal function of an advisory panel would be to develop recommendations on the implementation of Category III measures based on program objectives developed during Phase One (see discussion below). The advisory panel also would be authorized to solicit proposals for new measure alternatives if existing proposals were found inadequate to address those goals.
- Provide a structure to monitor the implementation of selected long-term Category III measures by other organizations and entities. As both a legal and a policy matter, the long-term institution probably should not contract directly for the design and construction of individual measures selected for implementation. Instead, selected measures will be implemented, using Category III funds, by a measure sponsor (generally a Federal, State, or local public agency) that may utilize outside contracts as necessary.
- Allow for periodic reporting to interested agencies and organizations regarding measures proposed and measures implemented. To the extent appropriate, reporting should include accounting of funds available to the institution for discretionary expenditure.

6.0 MEASURE SELECTION PROCESS

In connection with its efforts to identify Category III measures that could be implemented in the near term, the Working Group has recognized the need to adopt a more systematic approach to the overall process of measure selection. Thus, while it is important to move ahead promptly with those measures for which there is substantial consensus on potential biological benefit and practical feasibility, the Working Group also believes that overall implementation of the Category III program should be guided by well-defined objectives to achieve comprehensive Bay-Delta ecological protection. The development of program objectives therefore should be one of the first tasks undertaken by the Category III Steering Committee during the initial phase of Category III implementation.

6.1 The Ecological and Feasibility Teams

In proceeding with the measure selection process, the Steering Committee (and, as appropriate, its successor "permanent" institutional structure) would be assisted by the work of the TAC's Ecological and Feasibility Teams.

The Ecological Team's initial task would be responsible for identifying ecological objectives for use in the measure selection process. The team would be instructed to function in an apolitical fashion, in order to allow for the development of ecological objectives that may be addressed by non-flow measures with a high degree of integrity and credibility in the scientific community. All members of the team must clearly be qualified to develop objectives for the recovery of delta-dependent species and habitats. The Ecological Team would be appointed by the Steering Committee through the TAC selection process, and the Steering Committee would review and approve the objectives developed by the Ecological Team.

The Feasibility Team would be responsible for evaluating candidate activities and programs based on the criteria developed for and approved by the Category III Steering Committee. Like the Ecological Team, the Feasibility Team would be appointed by the Category III Steering Committee, through the TAC selection process. Consistent with direction from the Category III Steering Committee, the Feasibility Team and the Ecological Team would be expected to coordinate their recommendations in an interactive fashion.

6.2 Multi-Step Process

The Working Group is proposing an approach to measure selection that involves a multi-step process along the following lines:

Step 1: Establish Ecological Objectives

The first step in the measure selection process would be the development of ecological objectives that would reflect the Category III mission to address non-flow factors as an essential part of a comprehensive ecosystem protection plan for the Bay-Delta. Objectives would consist of specific attainment targets defined in terms of biological benefits, e.g., the recovery of a particular species or set of species. Objectives would not reflect feasibility issues, and they would not predetermine any particular set of Category III activities. Objectives would be coordinated with the goals of related programs, however. As discussed below, ultimate attainment of one or all of the objectives will not be the measure of success of the Category III program.

The identification of objectives should begin immediately upon completion of the Implementation Plan and should be completed by late summer or early fall, 1995. The Working Group does not expect that any additional research effort would be required for the development of ecological objectives.

Step 2: Develop Category III Programs and Activities

The second step in the measure selection process would entail the development of non-flow programs and/or measures that relate to the ecological objectives. Thus, a program or a set of actions or activities would be generated which could accomplish each of the objectives. The Category III program may include several types of activities, such as specific individual actions likely to move in the direction of one or more of the objectives, and/or programmatic approaches to address particular factors or problems as indicated below. Moreover, implementation of some Category III measures on which there already is substantial consensus may move forward before the development of a comprehensive set of programs and activities to achieve ecological goals. The measure selection process described here is not intended in any way to prevent that from occurring.

A. Planning Approach. In some cases, it may be appropriate to develop a workplan to address a particular ecological objective or non-flow factor relating to several objectives. For example, unscreened diversions may impact one or more of the objectives, and it therefore may be appropriate (in addition to focusing on individual screening measures in isolation) to develop a comprehensive workplan pursuant to which more rational decisions could be made. Planning may also be appropriate to address certain ecological objectives that are impacted by several non-flow factors. For example, it may be appropriate for Category III to develop an action plan identifying and coordinating the most critical non-flow factors and actions that would aid in the recovery of spring-run salmon populations.

B. Individual Measures. In some cases, attainment of the ecological objectives may be advanced by specific measures that are readily discernible and do not require coordination with a larger workplan. For example, elimination of fish passage problems is a non-flow factor directly impacting species. A comprehensive program is probably not necessary to deal with this factor in light of the significant information already available identifying the major barriers.

The development of Category III programs and measures would be undertaken by the Ecological Team with additional staff as may be appropriate to the program or activity being developed. The team may make use of the Category III database or generate new proposals for measures and/or programs necessary to fill gaps, to the extent that measures already developed appear insufficient to meet the various objectives. Programs and measures will be coordinated with activities being undertaken in connection with other related efforts, such as the Central Valley Project Improvement Act ("CVPIA"). The intent is that the first cut programs and activities be broad and not overly focused on feasibility issues, so as to allow for the consideration of new and creative activities and approaches to species and habitat recovery.

The development of Category III programs and measures should begin after the relevant ecological objectives are developed and could be completed by late fall, 1995. Some new research might be necessary to complete this process.

Step 3: Critical Evaluation of Activities

The third step in the measure selection process would be to evaluate candidate activities and programs based on the criteria developed for and approved by the Category III Steering Committee. This evaluation would include cost and feasibility criteria, and it would be accomplished by the Feasibility Team. The work product of this step in the measure selection process should be a list of measures that are likely to attain at least some of the ecological objectives by addressing non-flow factors and that also meet the relevant cost and feasibility criteria. The process should be initiated as soon as an appropriate set of potential activities and/or programs is available. Some new research may be necessary to complete this process.

Step 4: Final Approval

The Category III Steering Committee (and/or the "permanent" structure) will review the entire activity list, taking into account the recommendations of the TAC's Ecological and Feasibility teams, and make final funding decisions based on its independent analysis of the proposed activities' ability to meet ecological objectives, as well as their cost and feasibility.

6.3 Measuring Implementation Progress

As already noted, the establishment of ecological objectives would not predetermine any particular set of Category III activities. Nor would the success of Category III efforts be measured or determined by whether or not the ecological objectives are ultimately attained. The members of the Working Group recognize that the factors impacting ecological systems are extraordinarily complex and that there will be myriad reasons why an objective is or is not achieved. Moreover, there are any number of other programs that also may be at work in the achievement of any particular objective, as well as other factors confounding the positive impact of the Category III effort.

For these reasons, Category III "progress" would be measured against the actual implementation of measures that are designed to work toward the attainment of ecological objectives. For example, development of a program to control toxic discharges that may be affecting delta-dependent species would not by itself constitute success. However, concrete implementation of actual measures to control toxic discharges would constitute "success" for Category III purposes. This success would be no less meaningful in the event that a toxics program does not result in discernible improvements in delta species populations or habitats.

7.0 FUNDING CONSIDERATIONS

As discussed above, the Principles Agreement envisions that Category III activities generally are expected to require a financial commitment estimated to be \$60 million a year. In addition, the Principles Agreement states:

It is anticipated that new sources of funds will be required to adequately finance Category III activities. A process for evaluating existing funding and possible reprioritization will be used to finance a portion of Category III activities. Additional funds will be secured through a combination of Federal and State appropriations, user fees, and other sources as required.

Metropolitan's initial \$10 million contribution to near-term Category III implementation represents an important first step toward meeting the funding expectations contained in the Principles Agreement. In exploring the available options for developing additional funding, however, it has become clear that further clarification is needed on several fundamental issues. It also has become clear that these issues cannot be resolved at the Working Group level, but will require additional guidance from CALFED and the Stakeholders' Group, which includes the signatories to the Principles Agreement. To that end, the Working Group has formally requested that CALFED and Stakeholder representatives attempt to reach a consensus on each of the issues and to memorialize that consensus in a Statement of Principles on Funding Category III Implementation, to be made available by a date certain. See Letter from Walt Wadlow to Interested Parties, dated March __, 1995. Further clarification of the issues is an important next step in fulfilling the mandate of the Principles Agreement to proceed with Category III

implementation as an essential part of a comprehensive ecosystem protection plan for the Bay-Delta.

As considered by the Working Group, there appear to be four funding-related issues for which additional clarification will be required.³

Issue One -- Reprioritization of Existing Funding Sources

While the Principles Agreement indicates that some existing funding sources can be reprioritized and directed at Category III implementation, it does not specify which sources fall into this category or how that determination would be made. Examples of funding sources about which questions have been raised in this context include the CVPIA Restoration Fund and/or other revenue sources that already are dedicated to anadromous fish and native delta fish habitat improvements.

The resolution of this issue is important for two reasons. First, establishing which funding sources are available for reprioritization is necessary to determine how much additional funding may be required from other sources to make up the total \$60 million expected to be required for overall Category III funding per year. Second, it may be relevant to the determination of what kinds of Category III expenditures will qualify for credit against an organization's or agency's Category III funding obligation.

Issue Two -- Timing of Additional Funding Commitments

While the Principles Agreement estimates that a commitment of \$60 million a year will be required to fund Category III activities, it does not make it clear whether participating agencies and organizations should be expected to make specific monetary commitments prior to the selection of measures requiring funding (along the lines of Metropolitan's \$10 million initial contribution to near-term implementation). The alternative is to defer such commitments until after individual measures are selected and funding requirements are identified.

Requiring prior funding commitments may expedite later disbursement of funds by the Category III Steering Committee or its successor institution for long-term implementation. On the other hand, it also may create greater uncertainty for contributing

³ Clarification also is being sought on the issue of whether targeted water purchases are within the scope of Category III activities. The Principles Agreement directs the Federal government to purchase additional water (beyond that otherwise contemplated under the standards and operational constraints set out in the Agreement) where necessary to protect species listed as endangered or threatened under the Endangered Species Act while the Agreement is in effect. It does not explicitly provide for water purchases for other purposes, however, and the extent to which water purchases may be an appropriate means of meeting Category III implementation obligations is therefore unclear. While this is not strictly a funding issue, the Category III Working Group is seeking clarification of this question along with the other issues discussed in the text.

organizations needing assurance that funds ultimately will be spent on measures in an appropriate and effective manner. Because the amount of monies involved may be significant, and because it may affect the resolution of other outstanding issues, the Working Group needs further guidance on the extent to which prior funding commitments are expected.

Issue Three -- Public/Private Sector Funding Responsibilities

The Principles Agreement recognizes that 100% of needed Category III funds may not be provided through simple reprioritization of existing funding sources. It also acknowledges that additional funds will be secured through a combination of Federal and State appropriations, user fees, and other sources as required. The Principles Agreement does not make it clear, however, how remaining funding will be shared between the Federal and State agencies, between governmental and non-governmental interests, or among different types of non-governmental interests (including but not limited to the water user community, and environmental and fishery organizations).

The Working Group has not attempted to resolve how individual non-State and Federal government interests should allocate funding obligations among themselves. Nor has it attempted to resolve how those obligations ultimately will be discharged (e.g., through voluntary cash contributions, in-kind contributions, or fees). While important, these are issues that initially should be addressed separately by and among the affected organizations by a date certain, to be established by the policy group sub-committee.

Issue Four -- Credit Mechanisms

It generally has been acknowledged that some mechanism should be established to allow the crediting of early contributions to Category III funding against an organization's long-term funding obligation. Indeed, the Principles Agreement explicitly provides that subsequent financial agreements will provide that credit be given for Metropolitan's initial \$10 million contribution to short-term funding. How an appropriate credit mechanism will operate in practice, however, is less clear. Among other things, questions have been raised as to whether credit should be available for funding commitments made in response to prior regulatory or legislative requirements or directives. (In this regard, the availability of credit for payments made in connection with the CVPIA Restoration Fund has been a source of particular controversy.) While final resolution of the credit issue may not be essential to the commencement of Category III implementation efforts, clarification of the scope of potentially available credits may facilitate broader participation in those efforts.

8.0 CONCLUSION

The Category III Implementation Plan lays out a programmatic approach toward the development of effective strategies to address non-flow factors as an essential part of a comprehensive ecosystem protection plan for the Bay-Delta Estuary. Consistent with the direction provided by the December 1994 Principles Agreement, the Plan has been

developed in an open and collaborative fashion to reflect the input of a variety of governmental and non-governmental groups and organizations with interests in the Bay-Delta and the multiple beneficial uses associated with it.

The Implementation Plan is not intended, however, to be a final and binding expression of the views of those participating in its development on every aspect of the Category III program. Additional work needs to be done to clarify certain issues that could not be resolved in the time required to prepare the Plan. Further work also is needed to put into place the recommended institutional framework and implementation strategies. As a result of that work, new approaches may be proposed as alternatives to the various program elements suggested in the Plan.

The need for flexibility in carrying out the Implementation Plan will be an important theme to guide future Category III efforts. Nevertheless, the Plan represents an important first step in meeting the challenge of the Principles Agreement to address non-flow factors within the context of a comprehensive Bay-Delta protection program.